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| Notice of Allowability | Application No. | Applicant(s) |
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| | 09/811,146 | SORIN, WAYNE V. |
| | Examiner | Art Unit |
| | Brian M. Healy | 2874 |
| The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in this applied or other appropriate communication IGHTS. This application is subject to | plication. If not included will be mailed in due course. THIS |
| 1. This communication is responsive to the amendment filed | <u>7/28/203</u> . | |
| 2. The allowed claim(s) is/are <u>1-65</u> . | | |
| 3. The drawings filed on are accepted by the Examine | r. | |
| 4. Acknowledgment is made of a claim for foreign priority una) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date 02062004. Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the period in the common tregarding REQUIREMENT in 1. DEPOSIT OF and/or INFORMATION about the deposit 1 | e been received. been received in Application No. Oscuments have been received in this communication to file a reply IENT of this application. itted. Note the attached EXAMINER as reason(s) why the oath or declarate to be submitted. son's Patent Drawing Review (PTO- as Amendment / Comment or in the Comment or in the Comment of BIOLOGICAL MATERIAL resist of BIOLOGICAL MATERIAL resist of BIOLOGICAL MATERIAL resists of BIOLOGICAL materials and set the second secon | complying with the requirements S AMENDMENT or NOTICE OF tion is deficient. 948) attached Office action of the back) of d). nust be submitted. Note the |
| Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material | 6. ☐ Interview Summary Paper No./Mail Dat 8), 7. ☑ Examiner's Amendr | te |

Application/Control Number: 09/811,146

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DETAILED ACTION

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: The closest prior art of record, i.e. Morasca et. al., U.S.P. No.5,850,491 teaches (Figs.1-9) a double stage acousto-optic device 3,2 having a polarization independent response comprising: a substrate of bi-refingent material upon which is placed a first and second stage of polarization conversion with an optical signal at a predetermined wavelength with the first and second stages having tunable coupler means 127,227. Morasca et. al. 491' does not teach or suggest the claimed invention recited in claims 1-65 including an optical apparatus comprising: a first filter stage including a first tunable coupling member, a first differential delay with first and second tunable delay paths; and wherein the first tunable coupling member adjusts an amount of power of an optical signal divided onto the first and second tunable delay paths of the first differential delay. The second stage including; a second tunable coupling member; a second differential delay with first and second tunable delay paths; and wherein the second tunable coupling member adjusts an amount of power of the optical signal divided onto the first and second tunable delay paths of the second differential delay. The first and second tunable coupling members also includes first and second liquid crystal alignment members coupled to a voltage source. (See claims 1-65 for additional limitations listed in the dependent claims).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

EXAMINER'S COMMENT ON THE DRAWINGS

This application has been filed with obviously informal drawings. FORMAL DRAWINGS ARE NOW REQUIRED.

Any questions concerning this office action should be directed to:

Brian M. Healy

Primary Examiner

Art Unit: 2874

Phone: (571)272-2347

Brian Healy Primary Examiner